



GTech Learn

"Our focus is your Success"



Course Contents

GH-300: GitHub Copilot

Duration: 1 day	Level: Intermediate	Role: Administrator
Certification: Available	Public Schedules: View Dates	Private Delivery: Reach Us

What's included?

- ✓ Learn from Microsoft Certified Trainer (MCT's)
- ✓ 24x7 Lab Access
- ✓ Official Courseware
- ✓ Exam Preps / Practice Tests
- ✓ Badges & Completion Certificate
- ✓ Discounted Exam Vouchers



Digital & App Innovation
Azure

Training Services

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Overview

This course explores the use of AI in the context of GitHub Copilot, a generative AI tool for developers. It equips users with the knowledge and skills to use Copilot effectively while mitigating potential ethical and operational risks associated with AI usage.

Audience Profile

- AI Developers and Engineers: Professionals involved in creating and deploying AI systems who need to understand the ethical implications and governance frameworks.
- Data Scientists and Analysts: Individuals who work with data and AI models, focusing on ensuring transparency, fairness, and accountability in their work.
- Business Leaders and Managers: Decision-makers who oversee AI projects and need to implement responsible AI practices within their organizations.
- Policy Makers and Regulators: Those responsible for creating policies and regulations around AI usage, ensuring that AI systems are developed and used ethically and safely.

Contents

Learning Path 1: Responsible AI with GitHub Copilot

- Understand and apply the principles of Responsible AI usage.
- Identify limitations and mitigate risks associated with AI.
- Learn best practices for ensuring AI-generated code aligns with ethical standards and project-specific requirements.
- Recognize the importance of transparency and accountability in AI systems in building trust and maintain user confidence.

Learning Path 2: Introduction to GitHub Copilot

- Understand how GitHub Copilot can help you code by offering autocomplete-style suggestions.
- Understand the various ways to trigger GitHub Copilot.
- Comprehend the differences among GitHub Copilot Free, Pro, Business, and Enterprise.
- Know how to configure GitHub Copilot.
- Know how to troubleshoot GitHub Copilot.

Learning Path 3: Introduction to prompt engineering with GitHub Copilot

- Prompt Engineering:
- Processing Flow:
- Data Flow:
- Role of LLMs:

Learning Path 4: Using advanced GitHub Copilot features

- Work with a preconfigured GitHub repository in Codespaces with the GitHub Copilot extension.
- Use interactive features of GitHub Copilot to generate useful suggestions for an existing

project.

- Apply advanced GitHub Copilot features to learn more about a new project, write documentation, and create unit tests.

Learning Path 5: GitHub Copilot Across Environments: IDE, Chat, and Command Line Techniques

- How to utilize GitHub Copilot's autosuggestions and multiple suggestions pane.
- How to provide context to GitHub Copilot through inline comments, block comments, docstrings, and other types of comments to enhance code generation accuracy.
- Interacting with GitHub Copilot through natural language conversations to generate complex code, debug issues, and obtain code explanations in real-time.
- How to improve the relevance of GitHub Copilot Chat's suggestions by using scope referencing, slash commands, and agents
- How to interact with GitHub Copilot in CLI to get command explanations, suggestions, and even execute commands based on specific needs.
- How to set up GitHub Copilot CLI configurations, aliases, and manage privacy settings, including opting out of usage data collection.

Learning Path 6: Management and customization considerations with GitHub Copilot

- GitHub Copilot plans and their associated management and customization features.
- The contractual protections in GitHub Copilot and disabling matching public code.
- Managing content exclusions.
- Common problems with GitHub Copilot and their solutions.

Learning Path 7: Developer use cases for AI with GitHub Copilot

- Identify specific ways GitHub Copilot integrates seamlessly into developer workflows, enhancing the overall development experience and supporting individual coding preferences.
- Explore GitHub Copilot's potential impact on different stages of the Software Development Lifecycle.
- Evaluate the limitations of AI-assisted coding and measure its impact on development efficiency.

Learning Path 8: Develop unit tests using GitHub Copilot tools

- Creating unit tests in Visual Studio Code using GitHub Copilot and GitHub Copilot Chat.
- Creating specific unit tests for edge cases and boundary conditions using GitHub Copilot Chat.
- Creating unit test projects and managing unit tests in Visual Studio Code.
- Completing a "create unit tests" challenge and reviewing a possible solution.

Learning Path 9: Introduction to GitHub Copilot Business

- Understand the difference between GitHub Copilot Business versus GitHub Copilot Pro.
- Learn about specific use cases for GitHub Copilot Business and hear how customers are enhancing their productivity.
- Review how to enable GitHub Copilot Business.

Learning Path 10: Introduction to GitHub Copilot Enterprise

- Comprehend the specific features of GitHub Copilot Enterprise
- Understand the differences between GitHub Copilot Enterprise versus Business versus Pro & Free.
- Learn about specific use cases for GitHub Copilot Enterprise and hear how customers are enhancing their productivity.
- Review how to enable GitHub Copilot Enterprise.

Learning Path 11: Using GitHub Copilot with JavaScript

- Configure a GitHub repository in Codespaces and install GitHub Copilot extension.
- Crafted prompts to generate suggestions from GitHub Copilot
- Applied GitHub Copilot to improve your projects.

Learning Path 12: Using GitHub Copilot with Python

- Configure a GitHub repository in Codespaces and installed the GitHub Copilot extension.
- Craft prompts to generate suggestions from GitHub Copilot.
- Apply GitHub Copilot to improve your Python projects.

About GTech Learn

Established in 2011 in the USA, GTech Learn is one of the leading IT training organizations in North America & South East Asia. Driven by its unique USPs, GTech Learn is spurring competition, meeting the unmet needs of customers, assisting in skills upgrade, and supplementing talent pools with its presence in the USA, Canada, Singapore and India. This is consistent with our vision to help our Learners with skills upgrade for enhanced career opportunities.







As a Microsoft Learning Partner, we offer a broad range of learning solutions across the full Microsoft technology stack that can be customized.

Since 2011, GTech Learn has been developing custom-fit learning solutions that involve creating and delivering maximum results.

We have successfully helped all types of businesses, government entities, and individuals. For this reason, GTech has chosen by Microsoft to deliver comprehensive learning programs around the globe.

With flexible learning options, state-of-the-art delivery methods, numerous language preferences, experienced instructors, and complete dedication to our students, GTech Learn has the capabilities to help students develop their Microsoft skill sets and achieve increasingly high standards of productivity while organizations of all sizes realize the full potential of their technology investments.

Our Accreditations with Microsoft

 Security Training Services	 Modern Work Training Services	 Business Applications Training Services
 Infrastructure Azure Training Services	 Digital & App Innovation Azure Training Services	 Data & AI Azure Training Services